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**Cover picture:** Activation of platelets at or near a site of vessel injury induces secretion of ADP from dense granules. Released ADP activates and recruits additional platelets from the local microenvironment into the evolving thrombus (*right inset*). Activation and recruitment of platelets in proximity to endothelial cells is inhibited via metabolism of released ADP to AMP by endothelial ecto-ADPase/CD39. Platelets now return to an unstimulated state, thereby limiting thrombus formation (*left inset*). Identification and functional characterization of ecto-ADPase/CD39 as a physiological, constitutively expressed thromboregulator are described in the related article in this issue by Marcus, A. J. L. Broekman, J.H.F. Drosopoulos, N. Islam, T.N. Alyonycheva, L.B. Safier, K.A. Hajjar, D.N. Posnett, M.A. Schoenborn, K.A. Schooley, R.B. Gayle, and C.R. Maliszewski, pp. 1351-1360.

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